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EXAMINER

ELLIOTT IV, BENJAMIN H

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/573,396	Applicant(s) KIM ET AL.	
	Examiner BENJAMIN ELLIOTT	Art Unit 4144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/18/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-14 have been examined and are pending.

Claim Objections

2. Claims 1, 6, 7, 12, and 13 are objected to because of the following informalities: the term UPNP AV is not fully described in the claim text. Appropriate correction is required.
3. Claims 4, 6, 8, and 11 are objected to because of the following informalities: the term RTSP URL is not fully defined in the claim text. Appropriate correction is required.
4. Claim 14 is objected to because of the following informalities: the claim is dependant upon itself, and the examiner is unsure of its true dependency. Further, the claim is dependant to a "system", wherein the body of any one of the claims fails to mention a system.
5. Claims 4 and 11 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. See MPEP § 608.01(n). Accordingly, the claim has been further treated on the merits. Examiner has chosen to treat Claim 4 as being dependant on Claim 1, and chosen to treat Claim 11 as being dependant on Claim 8.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1, 2, 4, 7, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,778,187 by Monteiro et al (hereinafter "Monteiro"), and US Patent Publication 2004/0193609 A1 by Phan et al (hereinafter "Phan"), and further in view of US Patent 4,792,947 by Takiyasu et al (hereinafter "Takiyasu").

As per Claim 1, Monteiro discloses **a multicast streaming service method, in a UPnP AV network control method of performing a streaming transmission for playing media by having a media server MS** (col. 6, lines 3-9; Media servers multicast to multiple users in the network.), **multiple media renderers MR and a control point CP controlling the media server and the renderers** (col. 3, lines 29-33; The control server keeps track of the users and tells the media servers when to start and stop media transmissions.), **comprising the steps in which:**
the control point confirms contents and invokes a multicast streaming start action to the media server (col. 14, lines 40-55; The Media Server that contains the contents requested by the user is provided by the Control Server. The Media Server then initiates playback in the form of unicast, broadcast, or multicast transmissions.), **the media server informs the control point of a multicast group address for receiving the corresponding contents** (col. 8, lines 28-40; The control architecture of the invention allows for control messages to be passed between the Media Server and the Control Server. This information relates to the users in the network wherein (referring back to col. 6, lines 3-9 and lines 21-27), users are assigned to specific Media Servers via control messages. The multicasting is done by the media server through the internet as well. Figure 1 also shows Control Server (50) and Media Server (30)

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exchanging information.); **the control point informs the multiple media renderers of the multicast group address** (col. 3, lines 29-33; The control server keeps track of the users and tells the media servers when to start and stop media transmissions. col. 6, lines 3-9; Media servers multicast to multiple users in the network. Figure 1; Control Server (50) is in direct communication with users (40).), **and the multiple media renderers join the multicast group address, confirm the multicast address and receive the corresponding contents** (col. 6, lines 3-9; Media servers multicast to multiple users in the network. The users receive the packet stream. Col. 1, lines 38-50. Multicast addresses are those of users wishing to join a group.).

Although Monteiro mentions control points (servers), media servers, and media renderers (users that can receive and playback audio and video transmissions, see col. 2, lines 8-13), Monteiro fails to mention implementing this method in a UPnP network for audio and video devices. Monteiro also fails to mention the confirmation of the address.

However, Phan teaches a method for distributing content over a network, preferably to and from UPnP enabled devices ([0026]). Phan goes on to mention that UPnP devices can use many protocols to transmit media data including Internet multicasting ([0008]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Monteiro to include UPnP-enabled devices in a UPnP A/V network control method taught by Phan, because by using the UPnP standard, a device can dynamically join a network, obtain an Internet Protocol

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address, convey capabilities, and learn the presence and capabilities of other devices (Phan; [0002]).

The combination of Monteiro and Phan fails to teach the limitation regarding a user (rendering device) confirming the multicast address.

However, Takiyasu teaches a method of multi-address communication in which a node sends a multicast confirmation in response to a node sending a multicast confirmation request (Abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Monteiro and Phan to include confirmation of a multicast address at a user device taught by Takiyasu, because by confirming the address at the user, the sending node is informed of success or failure of received transmission (Takiyasu; col. 2, lines 23-30).

As per Claim 2, Monteiro in view of Phan and further in view of Takiyasu discloses **the method of claim 1, comprising the step in which the media server starts the multicast streaming of the contents before the control point informs the multiple media renderers of the multicast group address** (Monteiro; col. 14, lines 40-55; The Media Server that contains the contents requested by the user is provided by the Control Server. The Media Server then initiates playback in the form of unicast, broadcast, or multicast transmissions.).

As per Claim 4, the combination of Monteiro, Phan, and Takiyasu disclose **the method of claims 1[, 2 and 3], wherein the multicast group address is a RTSP URL, the RTSP URL being in the form of rtsp://ipaddress/path** (Phan; [0023]; Transfer protocols include RTSP. [0019]; The control point sends a control message to the device's URL for services provided by the device.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Monteiro and Takiyasu to include the multicast addressing scheme of RTSP URL taught by Phan as nothing more than a design choice when given the ability to choose from HTTP, RTP/RTSP, and IEE 1394.

As per Claim 7, Monteiro **discloses a multicast streaming service method, in a UPnP AV network control method of performing media playing by having multiple media renderers MR** (col. 6, lines 3-9; Media servers multicast to multiple users in the network. col. 3, lines 29-33; The control server keeps track of the users and tells the media servers when to start and stop media transmissions.), **comprising the steps of:**

confirming if contents are multicast or not, receiving a multicast group address if the presence of multicasting is confirmed and joining the multicast group address, confirming the multicast address and receiving the corresponding multicast contents (col. 14, lines 40-55; The Media Server that contains the contents requested by the user is provided by the Control Server. The Media Server then initiates playback in the form of unicast, broadcast, or multicast transmissions.).

Although Monteiro mentions control points (servers), media servers, and media renderers (users that can receive and playback audio and video transmissions, see col. 2, lines 8-13), Monteiro fails to mention implementing this method in a UPnP network for audio and video devices. Monteiro also fails to mention the confirmation of the address.

However, Phan teaches a method for distributing content over a network, preferably to and from UPnP enabled devices ([0026]). Phan goes on to mention that UPnP devices can use many protocols to transmit media data including Internet multicasting ([0008]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Monteiro to include UPnP-enabled devices in a UPnP A/V network control method taught by Phan, because by using the UPnP standard, a device can dynamically join a network, obtain an Internet Protocol address, convey capabilities, and learn the presence and capabilities of other devices ([0002]).

The combination of Monteiro and Phan fails to teach the limitation regarding a user (rendering device) confirming the multicast address.

However, Takiyasu teaches a method of multi-address communication in which a node sends a multicast confirmation in response to a node sending a multicast confirmation request (Abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Monteiro and Phan to include confirmation of a multicast address at a user device taught by Takiyasu, because by

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confirming the address at the user, the sending node is informed of success or failure of received transmission (col. 2, lines 23-30).

As per Claim 13, Monteiro discloses **a multicast streaming service method, in a UPnP AV network control method of performing a streaming transmission for playing media** (col. 6, lines 3-9; Media servers multicast to multiple users in the network. col. 3, lines 29-33; The control server keeps track of the users and tells the media servers when to start and stop media transmissions.), **composing multiple media receiving a multicast group address if the presence of multicasting is confirmed, joining the multicast group address, confirming the multicast address and receiving the corresponding multicast contents** (col. 14, lines 40-55; The Media Server that contains the contents requested by the user is provided by the Control Server. The Media Server then initiates playback in the form of unicast, broadcast, or multicast transmissions.).

Although Monteiro mentions control points (servers), media servers, and media renderers (users that can receive and playback audio and video transmissions, see col. 2, lines 8-13), Monteiro fails to mention implementing this method in a UPnP network for audio and video devices. Monteiro also fails to mention the confirmation of the address.

However, Phan teaches a method for distributing content over a network, preferably to and from UPnP enabled devices ([0026]). Phan goes on to mention that UPnP devices can use many protocols to transmit media data including Internet multicasting ([0008]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Monteiro to include UPnP-enabled devices in a UPnP A/V network control method taught by Phan, because by using the UPnP standard, a device can dynamically join a network, obtain an Internet Protocol address, convey capabilities, and learn the presence and capabilities of other devices ([0002]).

The combination of Monteiro and Phan fails to teach the limitation regarding a user (rendering device) confirming the multicast address.

However, Takiyasu teaches a method of multi-address communication in which a node sends a multicast confirmation in response to a node sending a multicast confirmation request (Abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Monteiro and Phan to include confirmation of a multicast address at a user device taught by Takiyasu, because by confirming the address at the user, the sending node is informed of success or failure of received transmission (col. 2, lines 23-30).

9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,778,187 by Monteiro et al (hereinafter "Monteiro"), and US Patent Publication 2004/0193609 A1 by Phan et al (hereinafter "Phan"), and US Patent 4,792,947 by Takiyasu et al (hereinafter "Takiyasu"), and further in view of US Patent 7,007,086 B2 by Zhu et al (hereinafter "Zhu").

As per Claim 3, Monteiro in view of Phan and further in view of Phan teaches the **method of claim 1, comprising the step in which the media server starts the multicast streaming of the corresponding contents after a lapse of a predetermined time after informing the control point of the multicast group address so that the multiple media renderers can confirm the multicast group address and then receive the corresponding contents from the control point** (Monteiro; col. 14, lines 40-55; The Media Server that contains the contents requested by the user is provided by the Control Server. The Media Server then initiates playback in the form of unicast, broadcast, or multicast transmissions. Phan; [0026]; Phan teaches a method for distributing content over a network, preferably to and from UPnP enabled devices. Takiyasu; Abstract; Takiyasu teaches a method of multi-address communication in which a node sends a multicast confirmation in response to a node sending a multicast confirmation request.)

The combination of Monteiro, Phan, and Takiyasu are silent on sending the content after a lapse of time after the control point informs the users of the multicast address.

However, Zhu teaches the control computer waits until all clients have established a connection with the server before sending the multicast message When the client has received the message, data is sent to and from the receiver (Zhu; col. 1, lines 59-66).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Monteiro, Phan, and Takiyasu to

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include streaming the corresponding contents after a lapse of a predetermined time after informing the control point of the multicast group address taught by Zhu, because this limitation would allow the system to more accurately measure multi-connection performance (Zhu; col. 1, lines 66-67 and col. 2, lines 1-2).

10. Claims 5 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,778,187 by Monteiro et al (hereinafter "Monteiro"), and US Patent Publication 2004/0193609 A1 by Phan et al (hereinafter "Phan"), and US Patent 4,792,947 by Takiyasu et al (hereinafter "Takiyasu"), and further in view of US Patent 7,031,945 B1 by Donner (hereinafter "Donner").

As per Claim 5 the combination of Monteiro, Phan, and Takiyasu disclose **the method of claim 1, comprising the step of finishing the reception of multicast contents if 'Leave()' action invoking is recognized** (Monteiro; col. 14, lines 40-55; The Media Server that contains the contents requested by the user is provided by the Control Server. The Media Server then initiates playback in the form of unicast, broadcast, or multicast transmissions. Phan; [0026]; Phan teaches a method for distributing content over a network, preferably to and from UPnP enabled devices. Takiyasu; Abstract; Takiyasu teaches a method of multi-address communication in which a node sends a multicast confirmation in response to a node sending a multicast confirmation request.).

The combination of Monteiro, Phan, and Takiyasu does not teach invoking a Leave() message to stop transmission of contents.

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However, Donner teaches multicasting join() messages and byebye() messages to stop transmission of their services in the multicast environment (col. 29, lines 45-48).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Monteiro, Phan, and Takiyasu to include multicasting functions that let other devices know to stop transmissions of content taught by Donner, because reducing the number of multicasting messages also reduces the amount of bandwidth consumed.

11. Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,778,187 by Monteiro et al (hereinafter "Monteiro"), in view of US Patent Publication 2004/0193609 A1 by Phan et al (hereinafter "Phan"), and further in view of US Patent 7,296,091 B1 by Dutta et al (hereinafter "Dutta").

As per Claim 6, Monteiro discloses **a multicast streaming service method, in a UPnP AV network control method of performing a streaming transmission for playing media by having a media server MS** (col. 6, lines 3-9; Media servers multicast to multiple users in the network.), **comprising the step of informing of a multicast group address if multicast start action is recognized and multicast streaming corresponding contents to the multicast address using a RTSP server** (col. 14, lines 40-55; The Media Server that contains the contents requested by the user

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is provided by the Control Server. The Media Server then initiates playback in the form of unicast, broadcast, or multicast transmissions. col. 8, lines 28-40; The control architecture of the invention allows for control messages to be passed between the Media Server and the Control Server. This information relates to the users in the network wherein (referring back to col. 6, lines 3-9 and lines 21-27), users are assigned to specific Media Servers via control messages. The multicasting is done by the media server through the internet as well. Figure 1 also shows Control Server (50) and Media Server (30) exchanging information.).

Monteiro is silent the method implementing UPnP and streaming the media contents via a real-time streaming protocol.

However, Phan teaches a method for distributing content over a network, preferably to and from UPnP enabled devices ([0026]). Phan goes on to mention that UPnP devices can use many protocols to transmit media data including Internet multicasting ([0008]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Monteiro to include UPnP-enabled devices in a UPnP A/V network control method taught by Phan, because by using the UPnP standard, a device can dynamically join a network, obtain an Internet Protocol address, convey capabilities, and learn the presence and capabilities of other devices ([0002]).

The combination of Monteiro and Phan fails to teach the limitation of streaming the media content via a RTSP server.

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However, Dutta teaches a system and method for a management server to request a RTSP server to start playing an advertisement to a local multicast address which is associated with a global multicast address (col. 15, lines 63-67 and col. 16, lines 1-3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Monteiro and Phan to include an RTSP server to transmit media content taught by Dutta because there exists a need in the art to effectively deploy transmissions and received transmissions between a source and a client (col. 2, lines 60-66).

As per Claim 12, Monteiro discloses **a multicast streaming service method, in a UPnP AM network control method of performing a streaming transmission for playing media** (col. 6, lines 3-9; Media servers multicast to multiple users in the network.), **comprising a media server informing of a multicast group address if multicast start action is recognized and multicast-streaming corresponding contents to the multicast address using a RTSP server** (col. 14, lines 40-55; The Media Server that contains the contents requested by the user is provided by the Control Server. The Media Server then initiates playback in the form of unicast, broadcast, or multicast transmissions. col. 8, lines 28-40; The control architecture of the invention allows for control messages to be passed between the Media Server and the Control Server. This information relates to the users in the network wherein (referring back to col. 6, lines 3-9 and lines 21-27), users are assigned to specific Media Servers

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via control messages. The multicasting is done by the media server through the internet as well. Figure 1 also shows Control Server (50) and Media Server (30) exchanging information.).

Monteiro is silent the method implementing UPnP and streaming the media contents via a real-time streaming protocol.

However, Phan teaches a method for distributing content over a network, preferably to and from UPnP enabled devices ([0026]). Phan goes on to mention that UPnP devices can use many protocols to transmit media data including Internet multicasting ([0008]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Monteiro to include UPnP-enabled devices in a UPnP A/V network control method taught by Phan, because by using the UPnP standard, a device can dynamically join a network, obtain an Internet Protocol address, convey capabilities, and learn the presence and capabilities of other devices ([0002]).

The combination of Monteiro and Phan fails to teach the limitation of streaming the media content via a RTSP server.

However, Dutta teaches a system and method for a management server to request a RTSP server to start playing an advertisement to a local multicast address which is associated with a global multicast address (col. 15, lines 63-67 and col. 16, lines 1-3).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Monteiro and Phan to include an RTSP server to transmit media content taught by Dutta because there exists a need in the art to effectively deploy transmissions and received transmissions between a source and a client (col. 2, lines 60-66).

12. Claims 8, 9, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,778,187 by Monteiro et al (hereinafter "Monteiro"), and US Patent 4,792,947 by Takiyasu et al (hereinafter "Takiyasu"), and further in view of US Patent 7,296,091 B1 by Dutta et al (hereinafter "Dutta").

As per Claim 8, Monteiro discloses **a multicast streaming service system, comprising:**
a media server MS providing a multicast group address and multicasting corresponding contents to a multicast address using a RTSP server (col. 6, lines 3-9; Media servers multicast to multiple users in the network. col. 14, lines 40-55; The Media Server that contains the contents requested by the user is provided by the Control Server. The Media Server then initiates playback in the form of unicast, broadcast, or multicast transmissions.); **multiple media renderers MR joining the RTSP server to confirm the multicast address and playing the contents transmitted to the multicast address** (col. 3, lines 29-33; The control server keeps track of the users and tells the media servers when to start and stop media transmissions.); **and a control point CP confirming the contents to be multicast**

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(col. 14, lines 40-55; The Media Server that contains the contents requested by the user is provided by the Control Server. The Media Server then initiates playback in the form of unicast, broadcast, or multicast transmissions.), **invoking a multicast start action** (col. 14, lines 40-55; The Media Server that contains the contents requested by the user is provided by the Control Server. The Media Server then initiates playback in the form of unicast, broadcast, or multicast transmissions.), **to the media server and informing the multiple media renderers of the multicast group address provided from the media server** (col. 3, lines 29-33; The control server keeps track of the users and tells the media servers when to start and stop media transmissions. col. 6, lines 3-9; Media servers multicast to multiple users in the network. Figure 1; Control Server (50) is in direct communication with users (40).).

Monteiro is silent on streaming media content via a RTSP server and confirming a multicast address.

However, Dutta teaches a system and method for a management server to request a RTSP server to start playing an advertisement to a local multicast address which is associated with a global multicast address (col. 15, lines 63-67 and col. 16, lines 1-3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Monteiro to include an RTSP server to transmit media content taught by Dutta because there exists a need in the art to effectively deploy transmissions and received transmissions between a source and a client (col. 2, lines 60-66).

The combination of Monteiro and Dutta does not teach confirming the multicast address.

However, Takiyasu teaches a method of multi-address communication in which a node sends a multicast confirmation in response to a node sending a multicast confirmation request (Abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Monteiro and Dutta to include confirmation of a multicast address at a user device taught by Takiyasu, because by confirming the address at the user, the sending node is informed of success or failure of received transmission (col. 2, lines 23-30).

As per Claim 9, Monteiro in view of Dutta and further in view of Takiyasu discloses **the system of claim 8, wherein the media server starts multicasting of the corresponding contents right after transmission of the multicast group address to the control point** (Monteiro; col. 14, lines 40-55; The Media Server that contains the contents requested by the user is provided by the Control Server. The Media Server then initiates playback in the form of unicast, broadcast, or multicast transmissions.).

As per Claim 11, Monteiro in view of Dutta and further in view of Takiyasu discloses **the method of claims 8[, 9 and 10], wherein the multicast group address is a RTSP URL, the RTSP URL being in the form of rtsp://ipaddress/path** (Dutta;

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col. 15, lines 63-67 and col. 16, lines 1-3; The management server requests a RTSP server to start playing an advertisement to a local multicast address which is associated with a global multicast address (Dutta; col. 15, lines 63-67 and col. 16, lines 1-3).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Monteiro and Takiyusa to include an RTSP server to transmit media content taught by Dutta because there exists a need in the art to effectively deploy transmissions and received transmissions between a source and a client (col. 2, lines 60-66).

13. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,778,187 by Monteiro et al (hereinafter "Monteiro"), in view of US Patent Publication 2004/0193609 A1 by Phan et al (hereinafter "Phan"), and US Patent 7,296,091 B1 by Dutta et al (hereinafter "Dutta"), and further in view of US Patent 7,007,086 B2 by Zhu et al (hereinafter "Zhu").

As per Claim 10, Monteiro in view of Phan and further of view Dutta discloses **the system of claim 8, wherein the media server starts multicasting of the corresponding contents after a lapse of a predetermined time since the transmission of the multicast group address** (Monteiro; col. 14, lines 40-55; The Media Server that contains the contents requested by the user is provided by the Control Server. The Media Server then initiates playback in the form of unicast, broadcast, or multicast transmissions. Phan; [0026]; Phan teaches a method for distributing content over a network, preferably to and from UPnP enabled devices.

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Takiyasu; Abstract; Takiyasu teaches a method of multi-address communication in which a node sends a multicast confirmation in response to a node sending a multicast confirmation request.

The combination of Monteiro, Phan, and Takiyasu are silent on sending the content after a lapse of time after the control point informs the users of the multicast address.

However, Zhu teaches the control computer waits until all clients have established a connection with the server before sending the multicast message. When the client has received the message, data is sent to and from the receiver (Zhu; col. 1, lines 59-66).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Monteiro, Phan, and Takiyasu to include streaming the corresponding contents after a lapse of a predetermined time after informing the control point of the multicast group address taught by Zhu, because this limitation would allow the system to more accurately measure multi-connection performance (Zhu; col. 1, lines 66-67 and col. 2, lines 1-2).

Conclusion

14. Prior art made of record not relied upon include:

US Patent Publication 2004/0243700 A1 by Weast discloses a system that allows a user interface to use a file system to initiate rendering of media.

US Patent Publication 2005/0002639 by Putterman et al discloses a system for utilizing buffer positions in a recordable media.

US Patent 7,069,312 B2 by Kostic et al discloses disambiguating multicast addresses in a networked environment.

US Patent Publication 2004/0221007 A1 by Roe et al discloses managing media servers using smart control points.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENJAMIN ELLIOTT whose telephone number is (571)270-7163. The examiner can normally be reached on Monday thru Thursday, 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Taghi Arani can be reached on 1-571-272-3787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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